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10/670,063	09/23/2003	Gregory C. Ladden	CE11643W	5118

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EXAMINER
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ZHU, BO HUI ALVIN

ART UNIT	PAPER NUMBER
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2619

NOTIFICATION DATE	DELIVERY MODE
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10/29/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com  
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## Office Action Summary

Application No.

10/670,063

Applicant(s)

LADDEN ET AL.

Examiner

Bo Hui A. Zhu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. Claims 1 – 5, 9 – 13 and 15 – 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Acampora et al. (US 4,760,570).

(1) with regard to claim 1:

Acampora et al. discloses a system and method, comprising: receiving by a source module ( $10_1 - 10_N$  on Fig. 1) data to be transferred; broadcasting the data to each destination module via a data link associated with the destination module and an inbound time slot of a plurality of inbound time slots (data are broadcasted on channels  $14_1 - 14_N$ , in time slots TIME SLOTS, on Fig. 1); selecting a destination module ( $12_1 - 12_N$  on Fig. 1) to process the data; and informing the selected destination module of the inbound time slot and receiving the data by the selected destination module via the inbound time slot (column 4, lines 47 – 50; the selected destination module receives data in the time slots that the data addressed to the destination module is transmitted in); and processing the data by the selected destination module (each output,  $12_1 - 12_N$ , receives its own data).

(2) with regard to claims 2, 3, 11 and 12:

Acampora et al. further discloses that determining a source module that receives the data (each packet filter,  $20_1 - 20_N$  on Fig. 2, determines a source module); and determining an inbound time slot in which the source module will broadcast the data based on time slot in which the source module receives the data (the time slot used to send input data through the broadcast channels,  $14_1 - 14_N$ , is determined by the time

slot arrangement from the inputs  $10_1 - 10_N$ , because data simply get propagated down the broadcast channels).

(3) with regard to claim 4:

Acampora et al. further discloses that the source module and the inbound time slot are determined in response to a set of a call (because the switching system, 11 on Fig. 1, is trying to transmit data from one point to another, i.e. from inputs to outputs, a connection is being set up and any type of connection between two points can be reasonably viewed as a call).

(4) with regard to claims 5 and 13:

Acampora et al. further discloses that the plurality of source modules and the plurality of destination modules are implemented in a transcoder (the switching system shown on Fig. 1 can be considered as a transcoder because the signal at the outputs of the switching system are different than the signal at the inputs, therefore they have different format and the whole system can be viewed as a transcoder).

(5) with regard to claims 9, 15 and 16:

Acampora et al. discloses a system and method, comprising: receiving by a source module of a plurality of source module ( $10_1 - 10_N$  on Fig. 1) data to be transferred; broadcasting the data to each destination module via a data link associated with the destination module of a plurality of destination module and an inbound time slot of a plurality of inbound time slots ( $14_1 - 14_N$  on Fig. 1; data being broadcasted in a time slot is inherent because time division multiplexing is used on the broadcast channels  $14_N$ ); a controller coupled to each destination module ( $15_1 - 15_N$  on Fig. 1), in response

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to a set up of a call (because the switching system, 11 on Fig. 1, is trying to transmit data from one point to another, i.e. from inputs to outputs, a connection is being set up and any type of connection between two points can reasonably be viewed as a call), selecting a destination module ( $12_1 - 12_N$  on Fig. 1) to process the data and informing the selected destination module of the inbound time slot and receiving the data by the selected destination module via the inbound time slot (column 4, lines 47 – 50; the destination is selected based on the address of the packet; the selected destination knowing the time slot to receive its data is inherent because it must know that in order to receive the data); and processing the data by the selected destination module (each output,  $12_1 - 12_N$ , receives its own data).

(6) with regard to claim 10:

Acampora et al. further discloses that the selected destination module processes the data based on the time slot and data link information provided by the call controller (the bus interfaces,  $15_1 - 15_N$  on Fig. 1, control the data processing for the destinations).

### ***Claim Rejections - 35 USC § 103***

2. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acampora et al. (US 4,760,570).

(1) with regard to claims 6 and 14:

Acampora et al. discloses all of the subject matter as discussed above, and further discloses that each source module comprises an interface board (each inputs,

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10<sub>1</sub> – 10<sub>N</sub> on Fig. 1, inherently must have an interface board interfacing with the switch 11). Acampora et al. does not teach each destination comprises a voice processing function and the data comprises voice data.

The Examiner takes Official Notice that the data with voice signal and using a voice signal coder to process the voice signal is well known in the art, for example, the Pulse-Code modulation (PCM) is used to process voice signal in a digital format and PCM coder is well known in the art. It would be desirable to have a voice processing device to process voice signal because it would allow the system the ability to process audio signal, thus increase the functionality of the system. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to incorporate voice processing in to the system of Acampora et al.

3. Claims 7, 8, 17 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acampora et al. (US 4,760,570) in view of Ando (US 4,392,222).

(1) with regard to claims 7, 17, 18 and 21:

Acampora et al. discloses all of the subject matter as discussed above.

However, Acampora et al. does not disclose allocating an outbound time slot for use in transferring outbound data from the selected destination module to the source module; tagging the data to produce tagged data; embedding by the destination module the tagged data in the allocated outbound time slot; and transferring the tagged data to the source module in the allocated outbound time slot.

Ando teaches a system that uses packet switching technique to transmit data in a time slot related to the direction of the transmission and attaching address information

to the data to identify the receiving terminal of the data being transmitted (column 4, lines 44 – 51).

It would have been desirable to use a encapsulation technique used in packet switching to transmit data to a specific destination because it would save system resource and make the system more efficient. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use the encapsulation technique as taught by Ando in the system of Acampora et al. in order to improve network efficiency.

(2) with regard to claims 8, 19, 22 and 24:

Acampora et al. discloses all of the subject matter as discussed above. However, Acampora et al. does not disclose receiving the tagged data by the source module; determining by the source module and based on the tag, that the data in the allocated outbound time slot is to be forwarded; forwarding the data by the source module.

Ando teaches attaching address information to data in order to identify the terminal to receive the data (column 4, lines 44 – 51; the receiving terminal inherently identifies it is the destination of the data based on the address information and further process the data after receiving it).

It would have been desirable to use an encapsulation technique used in packet switching to transmit data to a specific destination because it would save system resource and make the system more efficient. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use the encapsulation

technique as taught by Ando in the system of Acampora et al. in order to improve network efficiency.

(3) with regard to claim 20:

Acampora et al. discloses a system, comprising: a source module ( $10_1 - 10_N$  on Fig. 1); broadcasting the data to a plurality of destination module. Acampora et al. does not disclose allocating an outbound time slot for use in transferring outbound data from a selected destination module to the source module; tagging the data to produce tagged data; embedding by the destination module the tagged data in the allocated outbound time slot.

Ando teaches attaching address information to data in order to identify the terminal to receive the data (column 4, lines 44 – 51; the receiving terminal inherently identifies it is the destination of the data based on the address information and further process the data after receiving it).

It would have been desirable to use an encapsulation technique used in packet switching to transmit data to a specific destination because it would save system resource and make the system more efficient. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use the encapsulation technique as taught by Ando in the system of Acampora et al. in order to improve network efficiency.

(4) with regard to claim 23:

Acampora et al. discloses a method, comprising: determining a source module that broadcasts data (each packet filter,  $20_1 - 20_N$  on Fig. 2, determines a source



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module); selecting a destination module (column 4, lines 47 – 50; the destination is selected based on the address of the packet) to process the data. Acampora et al. does not disclose allocating an outbound time slot for use in transferring outbound data from a selected destination module to the source module; tagging the data to produce tagged data; embedding by the destination module the tagged data and transferring the tagged data to the source module in the allocated outbound time slot.

Ando teaches attaching address information to data in order to identify the terminal to receive the data (column 4, lines 44 – 51; the receiving terminal inherently identifies it is the destination of the data based on the address information and further process the data after receiving it).

It would have been desirable to use an encapsulation technique used in packet switching to transmit data to a specific destination because it would save system resource and make the system more efficient. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use the encapsulation technique as taught by Ando in the system of Acampora et al. in order to improve network efficiency.

### ***Response to Arguments***

4. Applicant's arguments filed on August 16, 2007 have been fully considered but they are not persuasive.

Regarding claims 1 and 9, Applicant traverses the rejections and argues that Acampora does not disclose the limitation of a selected destination module being

informed of the time slot at which the selected destination module receives the broadcast data. Applicant asserts that because packets are received at every time slot in Acampora therefore there is no need for the receiver of the packets to be informed of the time slots to receive the packets. The Examiner respectfully disagrees. Because the claim merely recites informing the selected destination module of the time slots and receiving the data by the selected destination module via the time slot, and Acampora discloses the selected destination must receive its data, thus the selected destination being informed of the time slot to receive its data is inherent because it must know that information in order to receive its data. Therefore, the Examiner believes that the cited reference can properly and reasonably read on the claim limitation.

Regarding claim 20, Applicant traverses the rejection and argues that Acampora in view of Ando does not disclose the limitation of a selected destination module applies a tag to data, conveys the tagged data to the source module and the tag indicates that the data included in the time slot is to be forwarded by the source module. The Examiner respectfully disagrees. Acampora already discloses the source modules and the selected destination modules as explained in the rejection; and Ando teaches a system where a receiving terminal can apply addressing information (tap) to the data on the backward path in order to send data back to the sending terminal. Note that the claim merely recites applying a tag to the data to convey the data to the source module, it does not describe how the destination module having hardware to physically attach taps to the data. The terminal in Ando while does not perform the physical tap attachment to the data by itself, it does still apply the tap via the exchange when trying

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to send data to another terminal. Lastly, the limitation of the tag indicating the data to be forwarded by the source module is inherent because addressing information of the data specifies the terminal that is going to process the data, for example to forward the data to the upper layer of the terminal for processing. Therefore, the Examiner believes that the cited references can properly and reasonably read on the claim limitation.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bo Hui A. Zhu whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BZ  
Examiner  
October 15, 2007



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